ADMINISTRATION REPORT OF CIVIL WORKS

OF THE

PUBLIC WORKS DEPARTMENT,

(GENERAL BRANCH,)

BOMBAY PRESIDENCY,

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FOR THE YEAR

1886-87.

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PUBLIC WORKS DEPARTMENT, BOMBAY PRESIDENCY,

(GENERAL BRANCH,)

FOR THE YEAR 1886-87.

GENERAL REMARKS.

1. The total expenditure of the year on Civil Works, Imperial and Provincial, Local Funds, Incorporated and Excluded, and Contributions, was Rs. 61,70,491 as per margin. In round figures the expenditure on New Works was 31⅛ lákhs; on Repairs 18¼ lákhs; on Establishment 10¾ lákhs; and on Tools and Plant nearly $\frac{9}{100}$ of a lákh.

In India.	Rs.
Imperial...	2,56,975
Provincial ...	47,20,792
Contributions ...	1,30,784
Local Funds, Incorporated	9,60,061
Do. Excluded...	1,01,879
Grand Total... Rs.	61,70,491

II.—CIVIL WORKS.

I.—CIVIL BUILDINGS.

I.—IMPERIAL SERVICES.

2. The expenditure under this head (exclusive of Forest and Customs buildings, the outlay on which is chargeable to Provincial funds) was Rs. 2,56,975, of which Rs. 1,53,300 was for Original Works; Rs. 56,282 for Repairs; Rs. 44,492 for Establishment; and Rs. 2,901 for Tools and Plant. The works carried out were as follows :—

1.—FOREST.

3. The buildings undertaken for the Forest Department during the year were a bungalow for the Divisional Forest Officer at Bijápur, which, with the exception of a few small items, was practically completed at an outlay of Rs. 11,473; another bungalow for the Divisional Forest Officer at Sirsi in the Kánara Collectorate, estimated to cost Rs. 10,231, was commenced, and carried up to plinth level at an outlay of Rs. 2,443; a building for the Range Forest Officer's quarters and office at Peint, and an office and servants' quarters in the compound of the District Forest Officer's bungalow at Násik, in the Násik Collectorate, were completed at a cost, respectively, of Rs. 3,535 and Rs. 3,262. The great want of quarters and office accommodation for Forest Rangers in the Thána District has been partly met as follows :— Offices and seed-rooms have been constructed at Váda, Bhiwndi, Murbád, and Kalyán, also offices and quarters for the Forest Ranger and 3 guards at Khurdi; accommodation for Forest Rangers has also been provided in the Mahálkari's Kacheris at Mokháda and Umbargaon, and the Mámlatdár's Kacheri at Dáhánu. Similar accommodation has been provided at the Mámlatdárs' Kacheris at Shrígonda and Sangamner in the Ahmednagar Collectorate.

2.—CUSTOMS.

4. The only work done under this head during the year was the construction of quarters for jemádárs, peons, and khalásis of the Preventive Service at Keamari, Karáchi, the estimated cost of which was Rs. 3,006.

3.—SALT.

5. The following buildings for the Salt Department were completed or in progress. In the Southern Division, the Salt Custom House at Ratnágiri, commenced in 1885-86, was completed at an outlay of Rs. 5,573; and quarters for the Jaskar Dárogha and his establishment at Dungri in the Uran Range, in the Kolába Collectorate, estimated to cost Rs. 10,094, were put in hand, and Rs. 6,214 expended during the year.

6. In the Northern Division, the road from Dungri Railway Station to the Dharasna salt pans, in the Surat Collectorate, commenced in the previous year, has been completed at a total outlay of Rs. 15,304; and the Sir Kárkún's Kacheri and Inspector's quarters at Dharasna, commenced during the year, have been nearly so, the expenditure having been Rs. 7,672 and Rs. 6,389, against the sanctioned estimates of Rs. 7,835 and Rs. 7,029.

7. Improvements to the Khárághoda and Udu Water-supply works, in the Ahmedabad Collectorate, with the object of draining off, immediately before the monsoon, the water remaining in the tank, which becomes very salt and offensive, were commenced, and an outlay of Rs. 1,279 incurred during the year: they consisted of the substitution of an iron sluice, 2 × 3 feet, for the old 9″ sluice valve and pipe in the main embankment of the Khárághoda Tank, and the enlargement of the culvert in connection therewith. The land recently taken up for the proposed increased supply was also demarcated with masonry pillars.

8. In Sind, buildings for the Salt establishment at Saran were commenced, and an outlay of Rs. 3,200 incurred during the year; and a bungalow for the Superintendent of the Salt Depôt at Sukkur completed at an outlay of Rs. 1,993.

4.—OPIUM.

9. The only work carried out during the year under this head was in connection with the new Opium Warehouse in Apollo Street, Bombay, which consisted of tiling the roof, and planking the corrugated-iron walls, with the object of rendering the warehouse cooler, and preventing damage to the opium stored therein. The outlay was Rs. 3,641, and the work was carried out by the Port Trustees, to whom the warehouse belongs, and from whom it has been leased by Government.

5.—MINT.

10. The following works were in hand in connection with the Bombay Mint. The new roof over the old coining-room and funnels, which were in progress at the close of the past year, were completed at an outlay of Rs. 16,951; a new blacksmiths' shop with hearths, and additions to the old smiths' shop, were commenced and completed at a cost of Rs. 4,252; a pipe connecting the tank water with the new engine was lowered and relaid for Rs. 1,000; and a new chimney, 10½ feet square at base, and 5 feet ½ inch at top, for the high pressure boilers lately erected in the Mint, was commenced, and a sum of Rs. 4,000 expended during the year.

6.—POST OFFICES.

11. The Telegraph Office at Dhárwár was converted into a combined Post and Telegraph Office, at a cost of Rs. 3,048; additions and alterations were carried out to the Post Office at Dhulia in Khándesh at a cost of Rs. 3,524; and the combined Post and Telegraph Office at Malabár Hill, Bombay, described in the last report, was completed at a total outlay of Rs. 14,796, and handed over for occupation.

7.—TELEGRAPH.

12. The only important work under this head in hand was the extension of the Central Telegraph Office at Bombay, which was commenced during the year. The cost of the extension is estimated at Rs. 1,61,833, of which Rs. 57,121 were expended in constructing the masonry of the ground-floor, and completing the flooring of the first floor. The building is being extended on the south side, and the new portion is designed to correspond in every respect with the northern end, from the tower to the north verandah; this will be an addition of 87 feet in length, the present width being maintained throughout. Two carriage porches, similar to the one at the northern end, are to be constructed for the convenience of the public, one on the east, and the other on the west, face of the building.

13. Preparatory to the construction of a Telegraph office at Mándvi, Bombay, which is to be taken in hand in 1887-88, a piece of ground, measuring 169 square yards, adjoining the Carnac Bandar siding road, was purchased from the Bombay Port Trust for Rs. 5,070.

II.—PROVINCIAL SERVICES.

14. The expenditure from Provincial and Local Funds, and Contributions, under this head (and including the outlay on Forest and Customs buildings) was Rs. 26,14,693, of which Rs. 17,42,123 was for Original Works; Rs. 3,63,793 for Repairs; Rs. 4,73,996 for Establishment;

and Rs. 34,786 for Tools and Plant. The principal works carried out during the year were as follows:—

12.—ADMINISTRATION.

15. Under this head, Mámlatdárs' Kacheris, on the standard plan, were in progress or completed, at Kalghatgi in the Dhárwár, Chikodi in the Belgaum, Uran in the Kolába, Bágalkot in the Bijápur, Wái in the Sátára, Sángola in the Sholápur, Shrígonda, Karjat, Ráhuri and Akola in the Ahmednagar, Niphád in the Násik, Jámner and Sakri in the Kháندesh, Dáhánu in the Thána, Anklesvar in the Broach, Nadiád in the Kaira, and Dhandhuka in the Ahmedabad Collectorates. At Vengurla in the Ratnágiri Collectorate, the old Dutch Factory, being no longer required as a rest-house for troops by the Military Department, was altered, at an outlay of Rs. 3,421, so as to afford accommodation for a Mámlatdár's Kacheri and a Subordinate Judge's Court. Quarters were in progress for the Mámlatdár and his establishment at Mángaon, in the Kolába Collectorate.

16. Record accommodation has been provided for the proposed new Mámlatdár's Kacheri at Vita in the Sátára Collectorate; that at the Mámlatdár's Kacheri at Indápur in the Poona Collectorate, and Sangamner in the Ahmednagar Collectorate, has been added to; and a new record-room has been in progress at the Mámlatdár's Kacheri at Jalálpor in the Surat Collectorate.

17. Mahálkaris' Kacheris have been constructed at Mokháda and Umbargaon in the Thána Collectorate.

18. In Sind, a new Mukhtkyárkarate at Bágo Tando, in the Hyderabad Collectorate, was sanctioned and commenced during the year; and special repairs and improvements carried out to the Kacheris at Hála and Shahdádpur.

19 In connection with the accommodation for District Officers in Sind, the Telegraph Office building at Shikárpur was converted into a Collector's residence; and two bungalows for Government offices purchased at Sukkur. Two Travellers' Bungalows at Thul and Shahdádpur, constructed from Local Funds, were purchased and ordered to be brought on the Provincial Returns for use as District Bungalows.

20. At Bijápur, in connection with the scheme for the adaptation of certain ancient buildings for the head-quarter station, the principal work in hand during the year was the new Civil Hospital, the expenditure on which amounted to Rs. 21,342, against the estimated cost of Rs. 38,276. Many unfinished items of work on the several buildings comprised in the scheme were completed in the year. The total estimated cost of the scheme is Rs. 3,61,241, and the total outlay to the end of the year was Rs. 3,35,034.

21. At Government Houses, a gardener's lodge has been constructed on a new site at Ganesh Khind for Rs. 5,582; a new stable at Malabár Hill, Bombay, at a cost of Rs. 17,311; and the addition to the Government House, Mahábaleshvar, consisting of a detached upper-storied bungalow, which was commenced during the previous year, was completed during the year, at a total outlay of Rs. 30,569.

22. The additions and alterations to the Commissioner's Press and peons' quarters at Karáchi, described in the last report, were completed during the year at an entire cost of Rs. 6,787.

23. Special repairs to the Residency at Aden, estimated to cost Rs. 11,538, were commenced during the year, and a portion carried out at an outlay of Rs. 7,563.

24. The distilleries at Bijápur, in the Bijápur Collectorate, and Mudihál, in the Dhárwár Collectorate, alluded to in the last report, have been in progress, and Rs. 14,577 and Rs. 16,715 spent on them, respectively, against the estimated cost of Rs. 22,461 and Rs. 42,926; and additions and alterations to the distillery at Násik were carried out, during the year, at a cost of Rs. 10,574.

25. For the Abkári Department, an Inspector's bungalow has been constructed at Ahmedabad at an outlay of Rs. 6,536; and the new Abkári godown at Aden, described in the last report, was completed early in the year.

26. Additions to the quarters of the Superintendent of the Government Observatory at Colába, estimated to cost Rs. 6,800, were commenced, and an outlay of Rs. 5,054 incurred.

27. A new residence for the Ráni of Akalkot, a State work, was undertaken by this Department, at the request of the Political Agent. The estimated cost of the building is Rs. 15,614, and will be provided by the State; the expenditure during the year has been Rs. 4,544.

13.—MINOR DEPARTMENTS.

28. During the year Rs. 3,550 were spent on the conservation of the Achyat Bibi's Mosque and Malik Allum's Mosques, and Rs. 3,776 on the Shah Allum's Mosque, at Ahmedabad; the latter amount being provided by contributions.

14.—LAW AND JUSTICE.

29. During the year, new Subordinate Judge's Court-houses, on the standard plan, were in progress, or completed, at Rájápur in the Ratnágiri Collectorate; Bágalkot in the Bijápur Collectorate; Islámpur in the Sátára Collectorate; Khed in the Poona Collectorate; Sangamner in the Ahmednagar Collectorate; Jalgaon and Bhusával in the Khándesh Collectorate; and at Nadiád in the Kaira Collectorate, the latter being designed to afford accommodation for the Small Cause Court also; and certain additions and alterations have been made to the Subordinate Judge's Court at Amalner in the Khándesh Collectorate.

30. The new Court-house for the District Judge at Belgaum, described in the previous year's report, was completed and handed over for occupation, the total outlay having been Rs. 42,018.

31. At Bombay, the new building for the Police Magistrates' Courts on the Cruickshank Road, Esplanade, fully described in the report for 1884-85, was raised in skeleton nearly to the level of the second floor, and the foundations of the outhouses were laid. The value of the work done during the year amounted to Rs. 80,000, thus bringing the total expenditure to Rs. 1,46,730, against the sanctioned estimate of Rs. 3,87,367.

32. The buildings on the Esplanade Cross Road hitherto rented for the accommodation of the Courts of Small Causes, the property of the late Kesavji Naik, being for sale in the market, were purchased by Government during the year for a sum of Rs. 1,50,000.

15.—ECCLESIASTICAL.

33. Under this head, the Church at Dhárwár, estimated to cost Rs. 10,197, alluded to in the last report, was completed according to the sanctioned design; and the furniture and fittings were also supplied, a moiety of the funds being contributed by Government, and a moiety raised by private contributions.

34. Special repairs to the roof of the Church at Kaira were sanctioned at an estimated cost of Rs. 2,792, of which Rs. 2,070 were spent during the year.

35. The Roman Catholic Chapel at Baroda, which was commenced in 1884-85, has been completed at a total outlay of Rs. 14,959, of which Rs. 7,778 were contributed by the Roman Catholic community. A portion of the furniture remains to be supplied during 1887-88.

36. The new quarters for the Cathedral Chaplains at Bombay, described in the report for 1884-85, were completed during the year, at a total outlay of Rs. 55,099, and handed over for occupation. The addition of roofs to the flat terraces on the east front of the building, having been found necessary, were carried out after the occupation of the building.

16.—JAILS.

37. The only important works under this head carried out during the year were the Jail at Sátára and the Juvenile Reformatory at Poona, both described in the report for 1884-85. The design for the first has, however, been considerably modified, it having been decided that a District Criminal Jail was not required at Sátára, in consequence of the opening of the Southern Mahratta Railway, and the facility thereby afforded for sending prisoners to the Central Jail at Yerrowda. The modified design is for a 1st class subordinate jail, the accommodation consisting of a block of cells for 15 prisoners, one half-sized barrack for 28 male prisoners, and a block of 4 cells for juveniles; the female prisoners to be accommodated in one of the old buildings. The expenditure during the year has been Rs. 8,673, making a total of Rs. 56,013 to the close of the year, against the modified estimate of Rs. 62,458. At the Juvenile Reformatory at Poona considerable progress has been made during the year, the expenditure in which was Rs. 25,022.

38. A cook-room and gallows have been constructed at the Jail at Shikárpur in Sind, at an outlay of Rs. 2,142.

17.—POLICE.

39. Police lines were completed during the year at Hubli in the Dhárwár Collectorate; Sangamner in the Ahmednagar Collectorate; Nándgaon in the Násik Collectorate; Karjat in the Thána Collectorate; Vágra, Amlesur, Kobla, Kareli, and Tankaria Bandar in the Broach Collectorate; Mirpur Batoro in the Karáchi Collectorate; and Police lines were in progress at Bágalkot in the Bijápur Collectorate; Chiplún, Rájápur, and Panvel in the Ratnágiri and Kolába Districts; Násik in the Násik Collectorate; Mahuda in the Kaira Collectorate; Godhra in the Panch Maháls Collectorate; and additions and alterations to four old blocks of Police Lines at Kaira were put in hand.

40. At Bombay, blue basalt stone pavement was substituted, for the concrete floors originally constructed, in the Commissioner of Police's office at Byculla, at a cost of Rs. 3,147.

18.—EDUCATIONAL.

41. At Bombay, the Provincial works carried out during the year were additions to the Grant Medical College, with the view of affording accommodation much required, which consisted of (1) extending the south wing 45 feet, to provide one class-room, 26½′×35′, one female students' room, 16′×35′, one retiring-room for female students, 11½′ × 7½′, on the ground-floor, and a hall, 43½′×36′, and a retiring-room, 11½′×7½′, on the first floor; and (2) additions to the laboratory, on the east side, to provide an upper-storied room, 25′3″×16′9″. The style and construction of these additions is similar to those of the existing building. The outlay has been Rs. 25,702.

42. At the Elphinstone College, to remove inconvenience felt when the Vehár water is shut off, seven iron tanks for the storage of water have been provided, and connected with the main Vehár pipe, at a cost of Rs. 2,187, thus securing a two-days' supply.

43. Of private buildings, the Wilson College, fully described in the last year's report, was in progress, and the pile driving, and filling in of the foundations with concrete, completed during the year, the total outlay having been Rs. 34,745.

44. The Indo-British Institution, described in the report for 1884-85, was completed during the year at a total cost of Rs. 1,08,357, of which Rs. 52,252 was charged against the Provincial grant. The building was handed over for occupation on the 1st February 1887.

45. The Cathedral High School still remains incomplete for want of funds. The first floor of the east wing was completed and handed over for use in January 1886. The masonry and woodwork of the second floor have been brought up to the level of the springing, and the outhouses, which remained partially unfinished at the close of the past year, were completed and handed over for use. The total outlay from the commencement has been Rs. 1,51,949, and of the year Rs. 9,429.

46. A large building at Parel, which belongs to the Society for the Prevention of Cruelty to Animals, was repaired and altered so as to make it suitable for a Veterinary College, and the following buildings constructed in the same compound, *viz.*, a dissecting room, farriers' quarters, cook-room and servants' quarters, a blacksmiths' forge and shoeing shed, and a privy for students. The total outlay has been Rs. 18,167.

47. At Poona, the restoration of the Vishrámbágh Palace, for the accommodation of the High School, described in the report for 1884-85, has been completed at a total cost of Rs. 51,059.

48. To the College of Science, a large drawing class room has been added; and detached buildings constructed for a residence for the Agricultural Instructor, and a Veterinary Hospital.

49. The High School at Broach, described in previous reports, has been completed at a cost of Rs. 38,477.

50. Local Fund school-houses have been completed at Borgaon in the Sátára Collectorate, and Bowla in the Ahmedabad Collectorate; and are in progress at Yával in the Khándesh Collectorate, Agáshi in the Thána Collectorate, and Godhavi in the Ahmedabad Collectorate.

51. Additions and alterations to the Free Church Mission School-house at Alíbág (a private building) were carried out at an outlay of Rs. 9,556.

52. A school building at Akalkot, chargeable to the funds of that State, and estimated to cost Rs. 23,513, has been in progress during the year, and Rs. 15,523 expended on completing the foundations, and collecting materials.

19.—MEDICAL.

53. Under this head, works were carried out at the following hospitals: At the Jamsetjee Jejeebhoy Hospital at Bombay, the Dispensary for women and children and quarters for students, described in the last report, were completed at a cost of Rs. 10,932; and the Nursing Sisters' quarters at a total cost of Rs. 22,678.

54. The Káma Hospital for women and children, described in the report for 1883-84, was completed during the year at a total cost of Rs. 1,71,710, and handed over for occupation

55. At the Sassoon Hospital at Poona, a new Contagious Diseases Ward has been built, and quarters for Nurses commenced.

56. The want of a new Hospital at Ahmednagar being greatly felt, and the inhabitants of that city having subscribed liberally for its erection, and contributions having been promised by the Municipality and the Local Funds of the District, proposals were submitted, in July 1885, to Government for the erection of a hospital to be called "The Ripon Hospital," as a memorial to the late Viceroy and Governor General, the Marquis of Ripon, coupled with an application for a grant-in-aid. The total contemplated cost of the site and

building was estimated at Rs. 41,000, of which the private and Municipal contributions amounted to Rs. 18,000, and that from Local Funds to Rs. 5,000, or Rs. 23,000 in all, and Government were asked to subscribe the remainder, Rs. 15,000 for the building, and Rs. 3,000 for the site. These proposals were not favourably entertained by Government, in view of the then existing strain on the finances, and the consequent necessity of avoiding all expenditure not absolutely necessary, though the urgent necessity for a new hospital was admitted. The matter was again submitted in February 1886, and as the Municipality had in the meantime purchased the site for Rs. 5,500, the estimated cost of the building, Rs. 37,800, alone remained to be provided. Towards this a grant of Rs. 15,000 was sanctioned from Provincial Funds, the balance being met from Local Funds and private and Municipal contributions. The work was commenced during the year, and Rs. 28,870 spent up to its close. The main building consists of 9 rooms, *viz.*, 1 Police ward for 14 beds, 1 male ward for 10 beds, and 1 for 6 beds, 1 female ward for 6 beds, 1 dispensary, 1 office, 1 private examination room, 1 store-room and 1 matron's room, with a verandah, 8 feet wide, all round the building. The out-buildings are 1 cook-room, 7 servants' quarters in one block, 1 dead-house, 2 latrines for males and females, quarters for 2 hospital assistants in an existing bungalow, and a masjid in the compound is to be converted into 2 isolation wards, each to contain 2 beds.

57. The Lunatic Asylum at Ratnágiri, described in the report for 1883-84, was completed during the year at a total outlay of Rs. 94,344, and handed over for occupation. The height of a portion of the compound wall, as originally designed, having been considered insufficient by the medical authorities, sanction was subsequently accorded to its being rebuilt in such a way as to allow of the height being increased to 15 feet, if afterwards found necessary. The work was estimated to cost Rs. 12,163, and was commenced during the year, the outlay to its close being Rs. 2,944.

58. At the Lunatic Asylum at Colába, owing to the destruction by fire of the temporary huts of the followers, 3 blocks, containing 42 new huts, were erected in their place, at a cost of Rs. 2,287.

59. Special repairs were carried out during the year to the temporary hospital and quarantine buildings at Manora, and the water-supply improved.

60. Local Fund dispensaries were completed during the year at Aklúj in the Sholápur Collectorate, Yeola in the Násik Collectorate, and A'nand in the Kaira Collectorate; and new dispensaries were commenced at Trimbak in the Násik Collectorate, and Bassein and Murbad in the Thána Collectorate: that at Bassein is estimated to cost Rs. 16,201, of which Rs. 11,500 have been contributed by Sir Dinshaw Manockjee Petit, Knight, and Rs. 5,000 are to be met from Municipal and Local Funds.

20.—MISCELLANEOUS.

61. The new building for the Government Central Press and General Record-room, fully described in the reports for 1883-84 and 1885-86, has been in progress. During the year the masonry and cutstone work of the ground and first floors have been completed, and the cutstone pilasters adjoining the main walls, intended to carry the girders of the floor, have been raised to the height of the second floor. The fire-proof flooring has also been constructed, and the walls of the second floor raised to a height of about 8 feet. The revised estimate for the building amounts to Rs. 7,30,593; and the total outlay to the end of the year to Rs. 3,78,582.

62. A residence was provided for the Health Officer of the Port of Bombay, by the purchase of Bungalow No. 41 in the Marine Lines, for Rs. 20,788.

63. The office, with outhouses, for the Executive Engineer, Ratnágiri, commenced in 1885-86, was completed during the year at an outlay of Rs. 6,282.

64. Additions were made to the Photozincographic Office at Poona at a cost of Rs. 7,086.

65. The stables for stallions and quarters for syces, at Ahmedabad, referred to in the last report, have been completed during the year at a total outlay of Rs. 2,759.

II.—COMMUNICATIONS.

66. The total outlay on Communications was Rs. 29,83,587, of which Rs. 10,79,123 was spent on Original Works; Rs. 13,58,435 on Repairs; Rs. 4,99,323 on Establishment; and Rs. 46,706 on Tools and Plant.

1.—ROADS.

67. A map in three sheets is attached, on which are shown the principal lines of road in progress during the year.

68. No new roads were commenced in the Southern Division in 1886-87, but good progress has been made with those, all direct railway feeders, reported on as in progress in 1885-86.

69. In the Belgaum Collectorate, work, as under, has been done. On the road from Nipáni (an important town on the old north and south mail road) to Mahálingpur, crossing the West Deccan Railway at Chikodi Road Station, a total distance of 58 miles, Rs. 53,502 was spent, the total expenditure up to the end of the year being Rs. 81,553, against the estimate of Rs. 3,58,257 for the whole line, which is to be bridged throughout; portions of this road, 20 miles in all, are in native territory, and for the construction of these portions, arrangements have been made by the Political Agent, Kolhápur and Southern Marátha Country.

70. On the improvements to the existing road from Hukeri to Gokák, 18 miles, crossing the West Deccan Line at Gokák Road Station, Rs. 59,959 have been spent, the total expenditure up to the end of the year having been Rs. 79,937, against the estimate of Rs. 2,22,718; this road also is to be bridged throughout, one paved crossing near Gokák excepted. It is not proposed to bridge the Ghatprabha River at Gokák.

71. On the road from Gokák towards Navalgund (in Dhárwár), 45 miles, in the Belgaum Collectorate, 21 miles have been completed, and 17 more are in progress; the expenditure in the year having been Rs. 86,272, and the total up to the end of the year, Rs. 1,32,146, against the estimate of Rs. 3,20,262.

72. The short road, ¾ mile long, to connect the Londa Railway Station, the junction of the West Deccan and South lines, with the Belgaum-Supa Road, has been completed; and two other short roads to connect the stations of Gunji and Khánápur on the West Deccan Line, with the nearest cart roads, commenced.

73. Improvements to the road from Bágevádi to Bail-Hongal, in the Sampgaon Táluka of the Belgaum Collectorate, were in progress, the expenditure of the year having been Rs. 18,819, against the estimate of Rs. 86,988.

74. In the Dhárwár Collectorate, short roads to connect the stations at Nagargali, Mugad, Dandur, and Hulkoti on the South Deccan Line, with the nearest cart roads, have been completed, and a similar junction with the Hubli Station of the same railway was in progress, as provincial roads, and the connection with the nearest road of the Annigeri Station of this railway was nearly completed as a Local work; also works required to fit the Tinai Ghát and its approach, (*viz.*, ten drains, cost Rs. 3,788, and metalling surface, cost Rs. 5,745) to carry the cart traffic over the road link, between, above and below ghát, temporary termini of the Hubli-Marmagão Railway, were completed.

75. The road to connect Motibennur (on the old mail road) with the Byádgi Station on the southern extension of the Southern Mahratta Railway, 3 miles long, has been completed, at a cost of Rs. 3,929, and the road from Havasbhavi to the same station, 10½ miles long, nearly completed, the expenditure in 1886-87 having been Rs. 9,488, against the estimate of Rs. 26,972.

76. The road from Dhárwár towards Saundatti, 13 miles, in Dhárwár, an important feeder, has been completed, the expenditure in 1886-87 having been Rs. 7,047, total Rs. 29,360, against the estimate of Rs. 35,512; and improvements to the road from Navalgund to Annigeri, chiefly consisting of metalling the surface, have been in progress, the expenditure to end of 1886-87 having been Rs. 14,762, against the estimate of Rs. 54,436.

77. In the Bijápur Collectorate, the short feeder from Indi Railway Station to town, 3½ miles long, reported on last year, has been quite completed, the total cost having been Rs. 12,068.

78. The road from Muddebihál to Chimalgi, crossing the East Deccan Line at Almatti, 19½ miles long, has been in progress, the expenditure in 1886-87 having been Rs. 25,623, and the total up to the end of the year Rs. 76,045, against the estimate of Rs. 85,906; and the feeder road from Guledgudd to Katigeri Station on the East Deccan Line, 6½ miles long, also reported on last year, has been proceeded with, the expenditure in 1886-87 having been Rs. 8,214, and the total up to the end of the year Rs. 25,252, against the estimate of Rs. 34,151.

79. The improvements to the Krishna River crossing at Kolhar, reported last year as nearly completed, have been completed, the expenditure in 1886-87 having been Rs. 2,310, and the total Rs. 59,917.

80. In the Ratnágiri Collectorate, the road from Sakharpe (at the foot of the A'mbághát) to Sangameshvar, a town on the one north and south road in Ratnágiri, and the head of the navigation of a tidal creek, reported on last year, has been completed. The expenditure in 1886-87 has been Rs. 11,457, and the total Rs. 84,076. This road was a great want; the traffic on it is already very considerable; it was made a murammed road, but the surface will have to be metalled.

81. The improvements to the road from Pen to Panvel, reported on last year, a Local road, chiefly for the salt traffic from the Pen saltworks, have been in progress. The expenditure in 1886-87 has been Rs. 9,997, against the estimated cost of Rs. 11,519.

82. In the Central Division, the roads in progress were as follows:—In the Sátára Collectorate, the West Deccan branch of the Southern Mahratta Railway was opened during the year as far as Koregaon, and the following roads, as Railway feeders, were also opened to traffic or were in progress:—

1st. The road from Wái to Watar Station. This road, which connects Mahábaleshvar with the railway, was described in last year's report; it was sufficiently advanced to admit of its being opened to traffic in November 1886, and by the end of the official year all the bridges and drains, with the exception of one culvert of 3 spans of 10 feet each near Watar Station, were completed, and the surface metalled, with the exception of a length of 4 miles of new road. The expenditure during the year was Rs. 88,172, and the total expenditure Rs. 1,08,246, the estimated cost being Rs. 1,30,928.

2nd. The feeder road from Sátára to Padli Station. This road was also described in last year's report. It was opened to traffic in November 1886, on the opening of the West Deccan Railway. At this date a large bridge, of 3 spans of 40 feet each, over the Vásna River, had not been completed; a diversion through the bed of the river was however made, and has been used without inconvenience to traffic. By the end of March 1887 the arches of the above bridge had been turned, and it has been completed and opened to traffic. The expenditure on the whole road during the year has been Rs. 64,862, and the total expenditure, up to the end of March 1887, Rs. 84,673, the estimated cost being Rs. 90,066, thus leaving Rs. 5,393 for expenditure during 1887-88.

3rd. The Karád-Nagaz Road, between Karád and Karád Railway Station. This is an unmetalled and unbridged road, but in view of the considerable traffic likely to arise from the opening of the railway, it was decided to improve the portion of road between the town of Karád and the station, a distance of about 3 miles, including the crossing of the Krishna River. The work consists of the construction of several slab drains, widening the existing road from 17 feet to 20 feet, embanking where necessary, and providing a good metalled surface to the road. A causeway of masonry, consisting of masonry paving on a mound of rubble stone, is also to be constructed through the Krishna River. The estimated cost of the work is Rs. 22,176, of which Rs. 12,014 is for improving the road, and Rs. 10,162 for the causeway. Sanction to the work having been received very late in the year, the expenditure has been only Rs. 2,115.

83. The construction of a masonry causeway over the River Krishna at Bhilowdi, a Local work, mentioned in the last report, has been completed, and opened to traffic, at a total cost of Rs. 4,200. The causeway is on the feeder road leading from Ashta to the Ashta Road Station, and, immediately on its being opened to traffic, was made use of for the conveyance of goods to the railway station; it is of considerable importance, as it was previously almost impossible for heavily laden carts to cross the river at any point within several miles of the site selected.

84. The construction of bridges and drains on the Wái-Pachwad Road, a Local work, was completed during the year at a cost of Rs. 9,710. The completion of the work renders the loop road, 8 miles in length, between the Poona-Belgaum and the Surul-Mahábaleshvar Roads practicable at all seasons of the year.

85. In the Poona Collectorate, two portions of the Kátraj tunnel, 47 and 26 feet in length respectively, have been lined with brick ribs and stone slabbing. The work was sanctioned in, and nearly completed during the year, the expenditure having been Rs. 7,151.

86. For the improvement of the Poona and Awlas Local road, 16 dams were designed to carry the road across nálás, and those works have been more than half completed during the year, at a cost of Rs. 4,657.

87. The work of improving the Poona-Singarh Local road, described in the last report, was continued, and seven out of the nine dams arranged for have been completed during the year, at a cost of Rs. 2,614.

88. In the Sholápur Collectorate, the road from Yedsi to Tadwalla, 8 miles in length, was in progress. The work was confined to the first 5 miles, and the earthwork, muram filling, and collection of metal, nearly finished, and one culvert commenced. The road dams in miles Nos. 43 and 44 have been commenced. The estimated cost is Rs. 67,554, and the expenditure during the year was Rs. 26,825.

89. The road from Kuslamb to Yermalla, about 8 miles in length, has been improved by coating it with 8 inches of metal, and constructing 5 road dams covering a length of 539 running feet. The work was completed at a cost of Rs. 11,630.

90. Certain improvements to the Karabgaum and Akalkot Road, a Contribution work, have been nearly completed. The length of this road is 7 miles, and average width 16 feet. The proposed improvement consists in metalling it to a depth of 4", after barrelling the road to proper section. During the last monsoon nearly 4 miles of the road were metalled for the half width, and rolled over. The remaining half width, together with the rest of the miles, will be metalled during the ensuing rainy season. Sufficient metal to complete the road has been collected and stacked on the road side. The estimated cost is Rs. 15,356, and the total expenditure has been Rs. 11,080.

91. In the Ahmednagar District the work of metalling the road from Ahmednagar to Toka was in progress. New metal for miles 16 to 26 has been supplied, spread, and consolidated. The total estimate is Rs. 63,756, the expenditure of the year has been Rs. 14,991, and the total outlay Rs. 38,988.

92. Very good progress has been made in the Ahmednagar District on the feeder road from Kurke *vid* Nevása to Belápur Railway Station, and several concrete drains have been completed; the experimental groyne in the Pravara River has also been finished. The remaining work of the bridge over the Landora Nála has been completed. The ferry boat and standard have been finished, and a store-house at Belápur has been built. The amount of the sanctioned estimate is Rs. 1,57,601; the expenditure in 1886-87 was Rs. 46,305, and the total Rs. 1,24,601.

93. A small sum of Rs. 3,754 was expended on another feeder road from Wambori to Khospuri. On this line of road a few concrete culverts, drains, and dams have been completed. The total expenditure was Rs. 31,508, against the sanctioned estimate of Rs. 38,573.

94. The remaining earthwork of the Tisgaon and Pathardi Local road, as also portions of the earth embanking here and there, have been completed. The concrete dams have been constructed. The amount of the sanctioned estimate is Rs. 31,694; the expenditure during the year was Rs. 3,961, and the total Rs. 19,608.

95. A country track over the Massa, Ambit, and Pachnai Ghâts in Akola Táluka, has been constructed this year in three portions of about 800 feet each. The road now goes close to the village of Ambit. It is to be kept in repair from Local Funds. The expenditure was Rs. 3,941, and the total expenditure Rs. 10,295; the amount of the estimate is Rs. 11,645.

96. The work of constructing the Loni-Bari Local road, 2·81 miles round the Mhaladevi Tank, alluded to in the last report, was in progress, and Rs. 1,050 expended during the year, against the estimate of Rs. 22,700.

97. The widening of the Vittah Ghát, on the Loni-Bari Local road, is incomplete Part of the ghát was provided with a milk-bush fence, on the lower side, and part of it with a round teak rafter parapet; guard stones and kerbing were put on where urgently wanted, and in some parts the road was widened. The length of the ghát is 2 miles. The expenditure during the year was Rs. 1,471, and the total expenditure has been Rs. 7,950, against the estimate of Rs. 8,848.

98. The Thugaon, Kotul, Brahmanwada Local road, is 23 miles. The District Local Board does not wish to incur any expenditure on this road beyond Kotul; and as the allotment of Rs. 1,244 made during the year was very small, it was spent on the worst and most dangerous portions of the Washira Ghát section. The gradients are very steep on this ghát, being in some places 1 in 6, and the ghát, which was constructed about 20 years ago by the Local Funds, is very badly lined out. A diversion of about ¾ of a mile must be made, and portion of the ghát entirely reconstructed, at a cost of at least Rs. 7,000.

99. In the Násik Collectorate, the work of improving and widening the Satighát roadway, for the remainder of the length, has been in progress. The only work remaining to be done at the end of the year was a small amount of cutting, and collecting, spreading, and consolidating of metal for about 1½ mile. The expenditure during the year was Rs. 7,905, and the total expenditure Rs. 29,760, against the sanctioned estimate of Rs. 33,092.

100. The 4th section of the Násik, Dindori, and Kalvan Local road, which commences from the top of the Ivatbari, the 32nd mile, was in progress. In 1885-86 the road was completed in every respect to the end of the 34th mile, and work of several descriptions was in progress from the 35th to the 38th miles. During the year, the roadway was embanked, murammed, and metalled, and the necessary cross drainage works have been completed up to half of its length of 38 miles. Work consisting of collecting materials, embanking, constructing culverts and drains, &c., was in progress from the other half to the end of the section to the 44th mile. The expenditure during the year was Rs. 14,813, and the total expenditure Rs. 1,40,383.

101. The Hasteh and Bareh Ghát Local road, about 5 miles in length, leading from the end of the Nanashi Ghát and Hasteh Road to Bareh, was in progress. At the end of 1885-86, work, such as clearing jungle and cutting in earth and boulders, was finished for about a ¼ mile. During the year Rs. 4,157 has been expended on similar work, and the rock cuttings, embankments, &c., were in progress throughout the remaining length. The amount of the sanctioned estimate is Rs. 25,876.

102. A road from Goldari to Ozar, Táluka Peint, an extension of the Harsul, Tanah and Goldari road, completed in portions during past years, and passing through very difficult country, was in progress; it is simply a cleared track. During the year Rs. 1,334 was expended over a length of 4 miles, principally by petty contract.

103. At the end of 1885-86 the renewal of 2 dips on the Satána-Málegaon Local road was completed; during the year under report, the remaining 3 have been finished. The total expenditure was Rs. 3,036, against the estimate of Rs. 3,057.

104. In the Khándesh Collectorate, the commencement of the work of the road from Yával to the River Tápti at Bhusával was delayed on account of standing crops, and the contractors failed to get enough labour, as high rates are paid in that district on account of works on the Great Indian Peninsula Railway. The amount of the estimate is Rs. 62,497; the expenditure during the year was Rs. 9,606, and the total expenditure Rs. 34,327.

105. The work of metalling the portion of the Bombay and Agra Road beyond the River Tápti was in progress, but it was much delayed owing to breaking out of sickness among the labourers. The amount of the sanctioned estimate is Rs. 49,183, and the expenditure in 1886-87 was Rs. 6,938.

106. The Local road from Sháháda to Dondaicha was in progress, but was suspended, as Rs. 12,080 were withdrawn by the President, District Local Board.

107. The first section of the Dharangaon and Chopda Road, joining Amalner and Chopda Road to the Tápti River, 10½ miles, was completed and opened in October 1886. An inspection bungalow at the Tápti is still to be constructed. The expenditure during the year was Rs. 15,131, against the estimate of Rs. 44,142.

108. The work of the Local road from Songír to Nandurbár, 4th section, from Ranála to Nandurbár, 12 miles, is almost complete. The consolidation of metal will be completed in the coming monsoon. The expenditure in the year was Rs. 18,101.

109. Three out of 7 miles of the Local road from Dhulia to Amalner, 1st portion from Phagna to Chopda, were opened for traffic in October 1886. Muram has been collected, and a number of masonry works completed for the remainder of the section. The expenditure was Rs. 15,080, against the estimate of Rs. 34,992.

110. About 2½ miles of embankment of the 1st portion of the Amalner and Chopda Local road have been completed, and the work suspended for want of funds. The expenditure in 1886-87 was Rs. 1,581.

111. In the Northern Division the roads in progress were :—In the Thána District, the provincial road from Dáhánu to Jawhár was completed for 22 miles with earthwork, muramming, and 46 bridges, culverts, and drains; among these there are 2 bridges of 20 feet span, constructed with concrete, arch quoins being of stone. Earthwork and muramming also is in progress in the remaining 6 miles of the road on the Jawhár side. The total outlay has been Rs. 1,30,166.

112. To connect the forests on the southern slopes of the Tongar hill, which were cut off by a long spur going up to Jocundra, a road, 2 miles, through the Satavli Khind, has been made, at a cost of Rs. 2,469. A little rolling and a little muram remains to complete it, and this will be done during the ensuing rains.

113. Of the Local Fund roads, the Bhiwndi-Váda Road was opened for traffic in 1885-86, but some finishing work remained, and this was carried out in 1886-87, at a cost of Rs. 6,258; the total cost to date being Rs. 1,20,917.

114. The 4th section of the Kalyán-Malsej Ghát Road, which was in progress last year, was completed up to Waishagra, and opened for traffic, at a cost of Rs. 29,076.

115. Roads from Kulwa to Belápur, Malad to Merva, and Borivli to Gorai, were sanctioned by the Sálsette Táluka Local Board, and slight progress made on each.

116. A road from Nirmal to Giring, being a section of a continuous line from Bassein to Agáshi, was commenced, and earthwork and part muramming was finished.

117. In the Surat Collectorate, the road from Mujoora gate of the City of Surat, to the Pársi Tower of Silence at Burthana, was sanctioned for Rs. 4,075 by the Local Board of the Chorási Táluka, and a sum of Rs. 995 was expended in collecting materials. A sanction of Rs. 15,523 was also obtained for making improvements to the road from Ránder to Olpád, and Rs. 10,906 have been expended during the year in collecting materials for the purpose.

118. In the Broach Collectorate, the fair-weather road from Dhadhal to Kharchi, in the Anklesvar Táluka, has been completed, with the exception of certain improvements to river crossings, &c., and Rs. 1,994 have been expended during the year, out of the sanctioned estimated amount of Rs. 3,119.

119. A dip near Khodi Amli, on the road from Anklesvar to Borebhata, has been completed at a total cost of Rs. 2,902.

120. In the Kaira District, the road from the Dákor and Kapadvanj line towards Modása, described in the last report, has been completed, and the road from Baad to Bibipura is finished, with the exception of metalling, which will be spread and consolidated next rains, and the bridge over the Vátrak River, which has been postponed for the present, and the design of which is to be revised, with the view ultimately of carrying the railway, if sanctioned.

121. Of the Local Fund roads, the work of building culverts on the Godhra and Sunth and Godhra and Sehera Roads in the Panch Mahâls, described in last year's report, was again in progress during the year. On the former line all the work in the first fourteen miles is nearly completed, and on the remaining portions most of the earthwork has been done and materials are being collected, and it is hoped that the whole road will be opened to traffic before the end of 1888-89.

122. On the Sehera Road, with the exception of two culverts in the 8th mile from Godhra, all the culverts and bridges have been completed, and it is anticipated that all the work on this line will be completed before the end of December 1887. The metalling of miles Nos. 1 and 2 on the Kaira and Sábarmati Road has been nearly finished; and materials are being collected for the improvements to the Vásad and Borsad Road, described in the last report. The only new work commenced in the year is the Local Fund road between Traj and Mehlaj: this is a short length of road intended to improve certain bad portions between the above-named villages, and consists of a culvert with embankment and metalling. The culvert and part of the embankment have been completed during the year, and the work is still in progress.

123. In the Ahmedabad District, the metalled road from Modása to Bibipara was in progress during the year. The road is a section of the Dákor-Modása Road *viâ* Kapadvanj. The estimated cost is Rs. 1,10,596, out of which Rs. 20,028 were spent during the year under report. The road is 18 miles long, 20′ wide, with the middle 12 feet metalled, and contains a masonry bridge over the Sakri River, of 3 spans of 40′ each, and 2 bridges of 2 spans of 20′ each, besides a number of drains, culverts, and dips. The road will probably be completed in 1888-89. The earthwork has been nearly completed, and the masonry works commenced.

124. The work of raising and metalling the road from Ahmedabad to Dholka, 18 miles, was commenced during the year, and a sum of Rs. 6,460 spent on the collection of materials, out of the total estimated amount of Rs. 1,37,913. The existing road is a cleared road, with portions here and there raised, drained and metalled. The whole of the road is now to be raised and metalled. The consolidation of the road surface is to be made by a layer of bricks, and over it river kunker, 4½″ deep. This road surfacing will not stand heavy traffic, but no stone is procurable, except at a very heavy charge.

125. In Sind a new road from Khyrpur to join the Ghogharo Road was commenced. This road is intended to open through communication between the villages south of Kambar to the Bakrani Railway Station, joining the Váda, Lárkhána, Ghogharo and Bakrani Road near Khyrpur. The estimated cost is Rs. 4,142, and the expenditure has been Rs. 1,212, from Local Funds.

126. The Sukkur and Aliwahn Road has been raised in certain low places, the whole surface levelled, and side drains cut where necessary, and culverts repaired. The estimated cost is Rs. 3,381, and the expenditure was Rs. 1,737.

2.—BRIDGES.

127. In the Kánara Collectorate, a bridge of two spans of 25 feet each, over the Nashi Nála, on the Shetowna and Kádra Road, (*i.e.*, the road from Kárwár to the Railway at Londa) in progress last year, was completed this year, at an outlay of Rs. 3,677, against the estimated cost of Rs. 3,868.

128. In the Ratnágiri Collectorate, the bridge over the Avera Nála, on the road from Háthkámbe to Dájipur (Ratnágiri to Phondaghát), in progress last year, was completed during the year, at a total outlay of Rs. 10,664, against the estimated cost of Rs. 11,525.

129. In the Kolába Collectorate, a masonry bridge, of two arches of 20 feet span each, over the Ghâni Irra Nála, in the 7th mile from Alíbág, on the Alíbág-Dharamtar Road, was commenced, and completed during the year, at an expenditure of Rs. 5,976, against the estimated cost of Rs. 6,328.

130. The work of substituting iron girders for the timber superstructure of the Kolevádi Bridge, over the Panvel Creek, on the Ulva-Campuli Road (the old Military road from Bombay to Poona), in progress last year, was completed during the year at an outlay of Rs. 11,451, against the estimated cost of Rs. 11,148.

131. In the Poona District, the work of constructing a bridge over the Indráyani River at Indori, fully described in the last report, was proceeded with, and all the piers and the left bank abutments were completed, the centres were fixed in arches Nos. 1 and 2, and the right bank abutment was completed to about 11 feet in height. It is expected that all the arches will be completed before the monsoon sets in. The expenditure during the year was Rs. 39,308.

132. In the Sátára District, the raising of the Níra River Bridge, rendered necessary in consequence of the construction of a weir dam on the Níra River at Vir, about 11 miles below the site of this bridge, and the possibly increased height of flood level which would be

caused thereby, was commenced, and it was decided to raise the bridge to a height of 8 feet, so as to give a clear headway of 12 feet between the maximum flood level and the bottom of the girders. The estimated cost of the work is Rs. 11,766, of which Rs. 5,001 were contributed from Imperial Irrigation funds. The bridge consists of 8 spans of 60 feet, the roadway, of ordinary metalling over curved iron plating and cross joists, being supported on lattice girders, 6 feet in depth. Owing to the floods which frequently occur in this river during December and January, work was not commenced until early in February. Some material had, however, been collected, and a diversion for traffic through the bed of the river constructed. The method adopted was to lighten the superstructure as much as possible, by the removal of the road metalling, hand railing, &c., and to raise each span complete a height of 2 feet at a time, by means of screw jacks, the masonry of piers and abutments being built up 2 feet at a time, as the girders were raised. Owing to the difficulty in procuring labour, all local labour being employed on the large irrigation works at Bhatgar, the progress of the work was unfortunately not as rapid as could be desired, the expenditure at the end of the official year being only Rs. 4,182, against an allotment of Rs. 6,765.

133. A foot bridge across the Urmodi River near Parli was commenced from Local Funds. This bridge is of timber superstructure on masonry piers, and consists of 10 spans of 36 feet each; it is intended to connect the hill country to the west of Sátára with the market town of Sátára, from which, during the rainy season, it is entirely cut off. The bridge is constructed for passenger and pack bullock traffic only, there being no carts or made roads in the hilly country to the west of it. The estimated cost of the bridge is Rs. 11,616, of which Rs. 9,978 was expended during the year.

134. In the Kaira District the only work in progress was the additions and alterations to the bridge over the Shedi River at Kaira, the expenditure on which is being met from Local Funds. The total amount of the estimate is Rs. 18,370, and the amount expended up to the end of the year Rs. 12,295. The old superstructure, which was of timber, was in an unsatisfactory condition, and is being replaced by iron cross and longitudinal girders, with roadway carried on teakwood planks. Half the number of girders were put up before the end of the year, and it is hoped the bridge will be again open for traffic before the beginning of the monsoon. A bridge over the Vátrak River at Bibipura, included in the estimate for the Baad and Bibipura Road, was sanctioned for execution during the year, and a sum of Rs. 25,000 allotted, but the work was suspended.

135. In the Ahmedabad Collectorate, a new wooden groyne has been constructed for the protection of the south abutment of the iron bridge over the Omkar River near Fedra, at a total cost of Rs. 1,995. The groyne consists of two rows of 10″ diameter teak piles for a length of 70′, and a single row of piles for a length of 35′, with planking on the inner sides, the space between the two rows being filled with earth.

136. In Sind, a bridge of one arch of 25 feet span, was constructed over the Chitiwah, the estimated cost of which is Rs. 3,689, and on which Rs. 3,541 were expended during the year; another of one arch of 25 feet span, was constructed over the Dhodrowah, on the road from Khathar to Seri, at a cost of Rs. 2,174; a third of one arch of 20 feet span over the Ghari Mandhar near Serani, in the Badin Táluka, was completed for Rs. 2,438; a fourth, of 36 feet span, over the Sangrowah, on the road from Hála to Gotána, was completed at a cost of Rs. 4,685; and a fifth of one span of 24 feet across the Sudabharwah, commenced last year, was completed for Rs. 3,819, all from Local Funds.

137. Numerous other smaller bridges and culverts over canals and kurriahs, which it is not necessary here to particularise, were also undertaken during the year from Local Funds, and completed.

5.—BOAT-BRIDGES AND FERRIES.

138. The construction of a wire rope ferry and a twin ferry boat on the Malprabha River at Kamatgi, in the Bijápur Collectorate, on the Hungund-Bágalkot Road, (feeder to the Railway at Bágalkot) was in progress. The total expenditure up to the end of the year amounted to Rs. 5,130, against the estimated cost of Rs. 6,387, from Local Funds.

139. At Ghoti in the Khándesh Collectorate, in connection with the ferry proposed to be constructed from Local Funds, the standards were erected before June; the tindal's quarters were completed, and the wire rope stretched; but owing to want of funds, no boats could be constructed; until they are, the expenditure incurred already, Rs. 2,137, will be so much capital misused. The estimated cost is Rs. 4,105.

140. On account of the many creeks in the Thána District, ferries are very important for communications, and 3 new tarafas, to replace old ones, were constructed, at a cost of Rs. 5,527, from Local Funds, during the year, for the bandars at Kalyán and Kolshet, and for the Dáhánu Creek at Dáhánu.

141. A new ferry boat has been constructed for the Shahibagh "Ara" or jetty on the Sábarmati River at Ahmedabad, at a cost of Rs. 2,759. The boat is 31′ long, 7½′ wide, and 3′ deep.

6.—ACCOMMODATION FOR TRAVELLERS.

142. At Chicknandi, in the Gokák Táluka of the Belgaum Collectorate, a dharmshála, estimated to cost Rs. 6,334 (from Local Funds), was put in hand, but it could not be completed during the year, owing to delay in selecting a suitable site. The expenditure to the end of the year amounted to Rs. 2,610.

143. In the Kánara Collectorate, at Gersappa, a travellers' bungalow, estimated to cost Rs. 8,019, was commenced; the expenditure of the year, owing to difficulties connected with the site, having amounted to only Rs. 1,710.

144. In the Sátára Collectorate, two dharmshálás have been constructed at Padli, close to the Sátára Road Station, and adjoining the Sátára-Padli feeder road, for the use of passengers by the railway. The total cost of the two buildings has been Rs. 4,050.

145. The travellers' bungalow at Baroda, referred to in the last report, has been completed with servants' quarters, stable, latrine, and wire fencing, at a total outlay of Rs. 11,048, against the estimated amount of Rs. 11,915. The expenditure during the year was Rs. 3,041.

III.—MISCELLANEOUS PUBLIC IMPROVEMENTS.

146. The total outlay under this head has been Rs. 3,15,231, of which Rs. 2,09,042 have been expended on Original Works; Rs. 46,683 on Repairs; Rs. 55,186 on Establishment; and Rs. 4,320 on Tools and Plant. The principal works under execution, or completed, were:—

3.—PAVING AND STREETS.

147. At Bombay, on the ground enclosed by the Hornby Road, Esplanade Main Road, and Waudby Road, there are several buildings, either completed or in course of construction; some of these are public buildings, and others are private ones, standing on ground purchased from Government. There were no metalled roads for these buildings, and it was considered necessary to construct them; accordingly four roads were constructed. Three of them are 30 feet wide, with footpaths, 10 feet wide, on either side of the road, and are about 1,520 feet long. The fourth is 670 feet long, and 40 feet wide, without footpaths. A part of the road connecting the Hornby Road with the Esplanade Main Road has not been constructed, as it is to pass over the site now occupied by the Pension Pay Office, but will be taken in hand on the removal of the building. The outlay during the year has been Rs. 19,792, out of the estimated cost of Rs. 24,439.

5.—WATER-SUPPLY.

148. In the Belgaum Collectorate, a well at Radanhatti, estimated to cost Rs. 6,400, was practically completed, from Local Funds, the paving round the outside having of necessity to be postponed, until the earth filling had consolidated under the action of next monsoon.

149. In the Bijápur Collectorate, a draw-well at Kajidoni, commenced in 1885-86, was in progress from Local Funds, the expenditure to the end of the year having amounted to Rs. 2,076, against the estimate of Rs. 4,431.

150. Certain improvements and repairs to the tank at Bhatta, in the Chorási Táluka of the Surat Collectorate, have been completed, at a cost of Rs. 2,221 from Local Funds.

151. Improvements to 10 tanks, all required for village water-supply, were in progress during the year in the Kaira Collectorate; of these 3 are completed, and the others have made good progress. The total outlay during the year was Rs. 5,371 from Local Funds.

152. In the Poona Collectorate, the Sirúr water-supply works were completed during the year at a total cost of Rs. 9,186, and handed over to the Municipality; those at Talegaon Dhábáde were completed in the previous year, except the town distribution, which was delayed for want of funds; an allotment having been provided in the year under report, the work was commenced during the latter part. The Junnar water-works, stated in the last report to be practically complete, have not yet been handed over, but have been maintained during the year by the Irrigation Department.

153. The Sátára water-supply works were handed over complete to the Municipality, after such repairs as were needed had been carried out.

154. Surveys for water-supply projects for the towns of Yamkanmardi in the Belgaum Collectorate, Hubli in the Dhárwár Collectorate, (for which a project, roughly estimated to cost about 2½ lákhs, has been submitted), and Yeola in the Násik Collectorate, and for the village of Chandwell in the Khándesh Collectorate; and for improving the existing water-supply at the towns of Islámpur in the Sátára Collectorate, and Bársi in the Sholápur Collectorate, have been undertaken by the Irrigation Department during the year; and

plans and estimates for the Islámpur, Chandwell, and Násik projects, the latter of which is estimated to cost Rs. 2,81,929, have been completed and submitted for the consideration of the Municipalities and authorities concerned; those for Yamkanmardi and Yeola are under preparation.

155. The Shirsi Bándhára, for the Akalkot State, was described in the Irrigation Administration Report for 1885-86. During the year the masonry weir was almost completed, and a channel was excavated from the sluice to the original canal. The revised estimate for the work is Rs. 17,152, and the total expenditure to date has been Rs. 16,506.

8.—LIGHT-HOUSES.

156. The work of substituting concrete arched roofing, for corrugated iron, over the outhouses of the light-house on the Vengurla rocks, described in last year's report, was practically completed during the year, at an outlay of Rs. 7,079, against the estimate of Rs. 7,395.

157. The site of the present light-house having many disadvantages, the chief being the insufficient height, above sea-level, of the light for safety, Government decided to erect a new light-house on a higher rock, some 666 yards to the eastward of the present site. The new buildings are estimated to cost Rs. 9,904. The work was sanctioned for execution during the year under report, but owing to the difficulty of transport of materials to the island and other causes, it could not be completed. The expenditure of the year amounted to Rs. 3,870.

158. The subsidiary buildings to the new Light-house at Perim, commenced during the past year, were completed during the year, and a lightning-conductor attached to the light-house itself, at a total outlay of Rs. 7,083.

MISCELLANEOUS.

159. The work of clearing and levelling ground in the Arkilla at Bijápur, and in the vicinity of public buildings and residences, and of making certain roads, has been carried on by the extra-mural convict gang located at Bijápur for the purpose. The clearance of the Arkilla is approaching completion. About half the area of the ground for the new bázár has been dealt with, and streets have been laid out. The precincts of the Assar Mahál and the Bol Gumaz have been cleared, and an approach road has been made to the former. The total expenditure on the work up to the end of the year amounted to Rs. 1,24,999, against the estimated cost of Rs. 1,83,310, the outlay during the year having been Rs. 32,319.

160. A new groyne in the River Tápti, near the French Tower at Surat, has been constructed at a cost of Rs. 9,797, against the sanctioned estimate of Rs. 11,328; this, it is hoped, will assist to a certain extent in diverting the course of the river from near the city bank.

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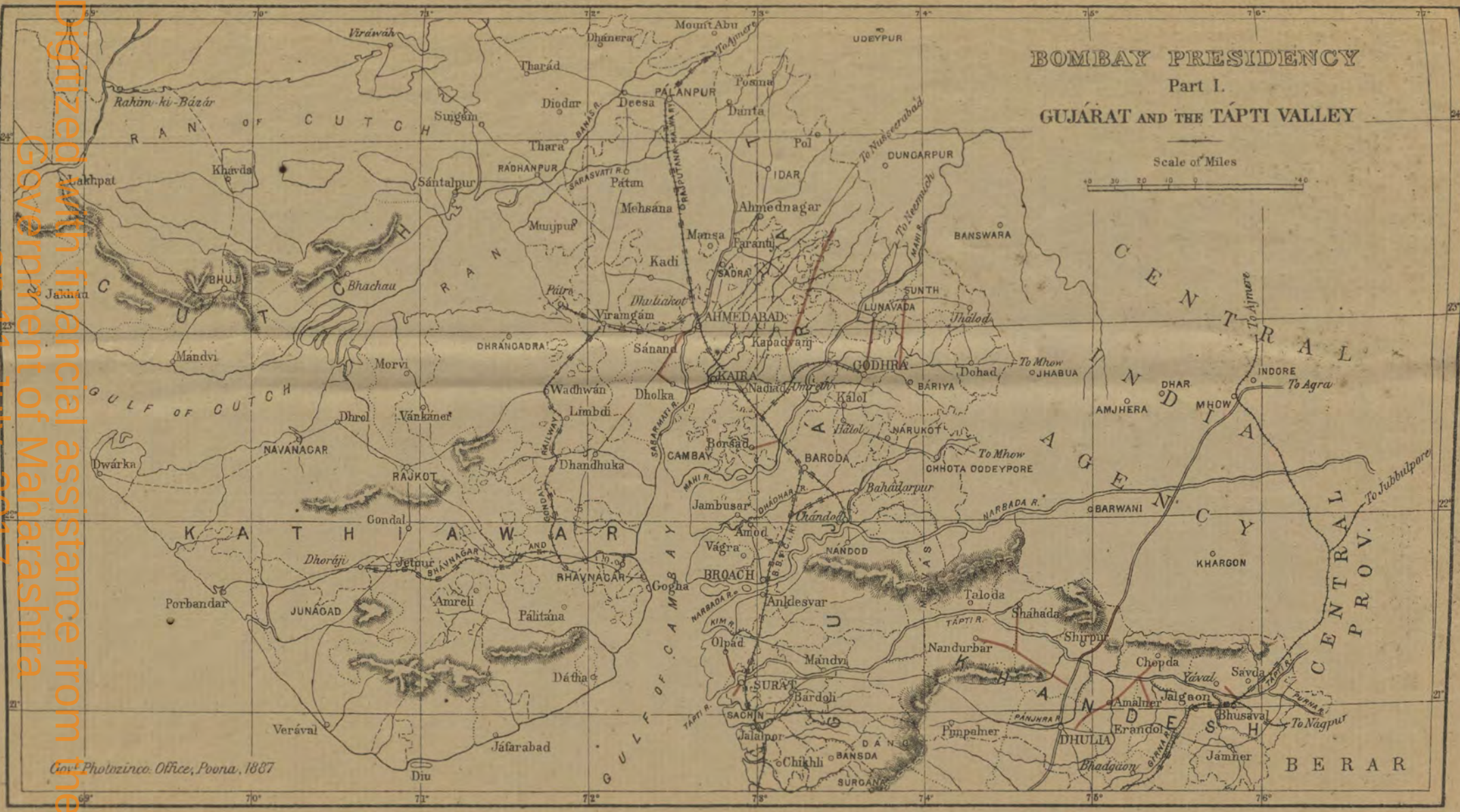

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